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APPEAL BRIEF UNDER 37 C.F.R. §41.37

Sir:

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee, Research in Motion, Limited.

II. RELATED APPEALS AND INTERFERENCES

None known.

III. STATUS OF CLAIMS

This application was filed with 15 claims, and 13 additional claims were added by amendment. Claims 1, 3-12, 15, 22-28, 31, and 34-38 are pending in the application and stand twice rejected. Claims 2, 13, 14, 16 to 21, 29, 30, 32, and 33 were canceled during prosecution. The rejection of claims 1, 3-12, 15, 22-28, 31, and 34-38 is appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims were filed after the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Brief Summary

A mobile electronic device for and a method of determining characters input on one or more touch interfaces of a mobile electronic device, are disclosed [Paragraph 23, line 9 and Paragraph 46, lines 17 and 18]. The characters may be arranged in rows on a touchscreen 204[Paragraph 28; page 6, line 7]. Areas of the touch screen are associated with the characters and the areas partially overlap to form intermediate areas between characters [Paragraph 44, page 10, lines 8 to 9]. When a user touches the touchscreen 204, the touchscreen determines the location of the touch on the touchscreen [Paragraph 29; page 6, lines 14 through 20].

A touch that is sufficiently close to the horizontal center of a letter results in the selection of that letter, while a touch at an intermediate area between two adjacent letters results in the selection of the two adjacent letters. The two adjacent letters are passed to a

predictive text software module that selects one of the two adjacent letters. [Paragraph 31; page 6, lines 28 to 31]

In the example shown in FIG. 6, the input is an R when the touch location is within a predetermined distance (D/2) of the horizontal center of R. The input is a T when the touch location is within a predetermined distance of the horizontal center of T. [Paragraph 41; page 9, lines 16 to 19]

When the touch location is at an intermediate region between two adjacent letters, the two adjacent letters are sent to the predictive text software module. In the example shown in FIG. 6, the letters R and T are both be passed to the predictive text software module when the touch location is in an intermediate area 603 between R and T [Paragraph 42; page 9, lines 20 to 28]

The virtual G key shown in FIG. 8B has an area bounded by the lines joining the centers of the letters (keys) nearest to G. When the touch location is in the region 821, the G, T, and F are sent to the predictive text software module. When the touch location is in the region 822, the letters G, V, and F are sent to the predictive text software module, and so forth for the remaining regions 823, 824, 825, 826. [Paragraph 50; page 11, lines 12 to 23]

B. Examples from the specification are provided in support of the independent claims.

1. A method comprising:	
associating areas of a touch interface of a mobile electronic device with characters,	Device 200 may include one or more touch interfaces, including a touch screen 204. [Paragraph [0027], page 6, lines 3-4; FIG. 2]. In the example of FIG. 1, a top touchpad 104 includes the letters "Q", "W", "R", "S", "T", "Y", "U", "I", "O", and "P", a middle touchpad 104 includes the letters "A", "S", "D", "F", "G", "H", "J", "K", and "L", and a bottom touchpad 104 includes the letters "Z", "X", "C", "V"., "B", "N", and "M". [Paragraph [0026], page 5, lines 25-28]
wherein at least some of the associated areas overlap with one another to form	The area 412 of the virtual "T" key is completely overlapped jointly by a portion of the area 414 of the virtual "R" key and a portion of the area 416 of the virtual "Y" key. [Paragraph [0036], page 8, lines 14-16]

intermediate regions that represent more than one character;	The area of the virtual keys partially overlap to define the intermediate areas. [Paragraph [0044], page 10, lines 8-9] A touch is received (700). If the touch location is within overlapping areas of two or more virtual keys (702), then all letters whose virtual key area includes the touch location are selected and sent to the predictive text software module (704). Paragraph [0047], page 10, lines 20 to 23]
detecting a location of a user's touch on the touch interface;	Similarly, when a user of device 200 touches touchscreen 204, the touchscreen will determine the location of the touch on the touchscreen. [Paragraph [0029], page 6, lines, 17-18]
for each area of the touch interface which includes the location, identifying the character associated therewith;	In another embodiment, described hereinbelow with respect to FIGS. 5 and 6, a touch sufficiently close to the horizontal center of a letter results in the selection of that letter, while a touch in an intermediate area between two adjacent letter results in the selection of the two adjacent letters and passing the two adjacent letters to a predictive text software module. [Paragraph [0031], page 6, line 27-31]
wherein for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character.	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802 and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C", "V", and 'B", respectively. [Paragraph [0049], page 10, line 31 to page 11, line 2] In another example, the virtual key of the letter "G" shown in FIG. 8B is defined as the area bounded by the lines joining the centers of the letters nearest to the letter "G". [Paragraph [0050], page 11, line 12-14]

6. A mobile electronic device comprising:	Reference is now made to FIG.1, which is a simplified front view of an exemplary mobile electronic device 100, and to FIG. 2, which is a simplified front view of another exemplary mobile electronic device 200. [Paragraph [0023], page 5, lines 8-12]
one or more touch interfaces to receive a touch by a user;	Device 100 may have one or more touch interfaces, including rows of touch pads 104 to allow text input. [Paragraph [0025], page 5, lines 20-21] When a user of device 100 touches one of the touchpad 104, the touchpad will determine the location of the touch on the touchpad. [Paragraph [0029], page 6, lines, 14-15]
a display for displaying one or more rows of characters;	Device 900 comprises a microprocessor 902 that controls the overall operation of the device 900, a persistent store 904, a volatile store 906, a display 908 and an input subsystem 910. [Paragraph [0053], page 12, lines 3-5] In the example shown in FIG. 2, letters are arranged in rows in

	touchscreen 204. [Paragraph [0028], page 6, lines 7-8]
a microprocessor for associating areas of the one or more touch interfaces with the characters,	Device 900 comprises a microprocessor 902 that controls the overall operation of the device 900, a persistent store 904, a volatile store 906, a display 908 and an input subsystem 910. [Paragraph [0053], page 12, lines 3-4]. Device 200 may include one or more touch interfaces, including a touch screen 204. [Paragraph [0027], page 6, lines 3-4; FIG. 2] In the example of FIG. 1, a top touchpad 104 includes the letters "Q", "W", "R", "S", "T", "Y", 'U", "I", "O", and "P", a middle touchpad 104 includes the letters "A", "S", "D", "F", "G", "H", "J", "K", and "L", and a bottom touchpad 104 includes the letters "Z", "X", "C", "V"., "B", "N", and "M". [Paragraph [0026], page 5, lines 25-28]
wherein at least some of the areas overlap with one another to form intermediate regions that represent more than one character and	The area 412 of the virtual "T" key is completely overlapped jointly by a portion of the area 414 of the virtual "R" key and a portion of the area 416 of the virtual "Y" key. [Paragraph [0036], page 8, lines 14-16] The area of the virtual keys partially overlap to define the intermediate areas. [Paragraph [0044], page 10, lines 8-9] A touch is received (700). If the touch location is within overlapping areas of two or more virtual keys (702), then all letters whose virtual key area includes the touch location are selected and sent to the predictive text software module (704). Paragraph [0047], page 10, lines 20 to 23]
identifying which characters are associated with the areas of the one or more touch interfaces that include a location of the touch;	In another embodiment, described hereinbelow with respect to FIGS. 5 and 6, a touch sufficiently close to the horizontal center of a letter results in the selection of that letter, while a touch in an intermediate area between two adjacent letter results in the selection of the two adjacent letters and passing the two adjacent letters to a predictive text software module. [Paragraph [0031], page 6, line 27-31]
wherein for a first character, an area of the one or more touch interfaces associated with the first character is bounded by joining the centers of characters nearest to the first character.	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802 and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C", "V", and 'B", respectively. [Paragraph [0049], page 10, line 31, page 11, line 2] In another example, the virtual key of the letter "G" shown in FIG. 8B is defined as the area bounded by the lines joining the centers of the letters nearest to the letter "G". [Paragraph [0050], page 11, line 12-14]

22. A mobile electronic device comprising:	Reference is now made to FIG.1, which is a simplified front view of an exemplary mobile electronic device 100, and to FIG. 2, which is a simplified front view of another exemplary mobile electronic device 200. [Paragraph [0023], page 5, lines 8-12]
one or more touch interfaces	Device 200 may include one or more touch interfaces, including a touch screen 204. [Paragraph [0027], page 6, lines 3-4]
configured to display one or more rows of characters	The letters may be printed directly on the touchpad, or may be located behind or printed on the back of a substantially translucent touchpad. [Paragraph [0026], page 5, lines 29-31]
and receive a touch by a user	When a user of device 100 touches one of the touchpad 104, the touchpad will determine the location of the touch on the touchpad. [Paragraph [0029], page 6, lines, 14-15]
a microprocessor	Microprocessor 902, in addition to its operating system functions, enables execution of software applications on the device 900. [Paragraph [0053], page 12, lines 12-13]
configured to associate areas of the one or more touch interfaces with the characters	Device 100 may have one or more touch interfaces, including rows of touch pads 104 to allow text input. [Paragraph [0025], page 5, lines 20-21] In the example of FIG. 1, a top touchpad 104 includes the letters "Q", "W", "R", "S", "T", "Y", 'U", "I", "O", and "P", a middle touchpad 104 includes the letters "A", "S", "D", "F", "G", "H", "J", "K", and "L", and a bottom touchpad 104 includes the letters "Z", "X", "C", "V"., "B", "N", and "M". [Paragraph [0026], page 5, lines 25-28]
wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character	The area of the virtual keys partially overlap to define the intermediate areas. [Paragraph [0044], page 10, lines 8-9] However, if the touch location is not within the predetermined distance D/2 of the horizontal center of a letter, then it is checked whether the touch location is in an intermediate region between two adjacent letters (506). [Paragraph [0042], page 9, lines 20-22, and FIG. 5]
and the microprocessor is further configured to identify which characters are associated with the areas of the one or more touch interfaces that includes a location of the touch	In another embodiment, described hereinbelow with respect to FIGS. 5 and 6, a touch sufficiently close to the horizontal center of a letter results in the selection of that letter, while a touch in an intermediate area between two adjacent letter results in the selection of the two adjacent letters and passing the two adjacent letters to a predictive text software module. [Paragraph [0031], page 6, line 27-31]
wherein for a first character, an area of the one or more touch interfaces	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802 and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C",

associated with the character is bounded by joining the centers of characters nearest to the character.	"V", and 'B", respectively. [Paragraph [0049], page 10, line 31, page 11, line 2] In another example, the virtual key of the letter "G" shown in FIG. 8B is defined as the area bounded by the lines joining the centers of the letters nearest to the letter "G". [Paragraph [0050], page 11, line 12-14]

34. A computer readable medium storing instructions for execution by a processor	The methods decribed hereinabove and illustrated with respect to FIGS. 3, 5, and 7 may be stored as instructions, fore example in persistent store 904,and executed by microprocessor 903 during processing of user input. [Paragraph [0057], page 12, lines 27-29]
of a mobile device for causing the mobile device to implement a method comprising:	Reference is now made to FIG.1, which is a simplified front view of an exemplary mobile electronic device 100, and to FIG. 2, which is a simplified front view of another exemplary mobile electronic device 200. [Paragraph [0023], page 5, lines 8-12]
associating areas of a touch interface of a mobile electronic device with characters,	Device 200 may include one or more touch interfaces, including a touch screen 204. [Paragraph [0027], page 6, lines 3-4; FIG. 2] In the example of FIG. 1, a top touchpad 104 includes the letters "Q", "W", "R", "S", "T", "Y", 'U", "I", "O", and "P", a middle touchpad 104 includes the letters "A", "S", "D", "F", "G", "H", "J", "K", and "L", and a bottom touchpad 104 includes the letters "Z", "X", "C", "V"., "B", "N", and "M". [Paragraph [0026], page 5, lines 25-28]
wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character;	The area of the virtual keys partially overlap to define the intermediate areas. [Paragraph [0044], page 10, lines 8-9] However, if the touch location is not within the predetermined distance D/2 of the horizontal center of a letter, then it is checked whether the touch location is in an intermediate region between two adjacent letters (506). [Paragraph [0042], page 9, lines 20-22, and FIG. 5]
detecting a location of a user's touch on the touch interface;	When a user of device 100 touches one of the touchpad 104, the touchpad will determine the location of the touch on the touchpad. [Paragraph [0029], page 6, lines, 14-15]
for each area of the touch interface which includes the location, identifying the character associated therewith;	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802 and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C", "V", and 'B", respectively. [Paragraph [0049], page 10, line 31, page 11, line 2]
wherein for a first character, the	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802

associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character.	and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C", "V", and 'B", respectively. [Paragraph [0049], page 10, line 31, page 11, line 2] In another example, the virtual key of the letter "G" shown in FIG. 8B is defined as the area bounded by the lines joining the centers of the letters nearest to the letter "G". [Paragraph [0050], page 11, line 12-14]

38. A method comprising:	
associating areas on a touchscreen display of an electronic device with characters	Device 200 may include one or more touch interfaces, including a touch screen 204. [Paragraph [0027], page 6, lines 3-4; FIG. 2] In the example of FIG. 1, a top touchpad 104 includes the letters "Q", "W", "R", "S", "T", "Y", 'U", "I", "O", and "P", a middle touchpad 104 includes the letters "A", "S", "D", "F", "G", "H", "J", "K", and "L", and a bottom touchpad 104 includes the letters "Z", "X", "C", "V"., "B", "N", and "M". [Paragraph [0026], page 5, lines 25-28]
at least some of the associated areas overlapping with one another at intermediate regions and at least one of the areas established by joining the centers of adjacent areas	The area of the virtual keys partially overlap to define the intermediate areas. [Paragraph [0044], page 10, lines 8-9] In another example, the virtual key of the letter "G" shown in FIG. 8B is defined as the area bounded by the lines joining the centers of the letters nearest to the letter "G". [Paragraph [0050], page 11, line 12-14]
detecting a location of a touch on the touchscreen display	When a user of device 100 touches one of the touchpad 104, the touchpad will determine the location of the touch on the touchpad. [Paragraph [0029], page 6, lines, 14-15]
identifying the characters associated with the areas in which the touch is located	For example, the virtual key of the letter "G" shown in FIG. 8A is defined as the area bounded by the horizontal centers 802 and 804 of the letter "F" and "H", respectively and by vertical centers 806 and 808 of the letters "R", "T", and "Y" and "C", "V", and 'B", respectively. [Paragraph [0049], page 10, line 31, page 11, line 2]

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 3-7, 9, 10, 12, 15, 22, 23, 25, 26, 28, 31, 34, 35, and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua (U.S. Patent Publication No. 2004/0183833) in view of Davidson (U.S. Patent No. 5,6,627,567) and Vargas (U.S. Patent No. 5,748,512). Claims 8, 11, 24, and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua, Davidson, Vargas, and further in view of Moon et al. (U.S. Patent No. 6,259,436). Claims 36 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua, Davidson, Vargas, and further in view of Robinson et al. (U.S. Patent No. 6,801,190).

VII. ARGUMENT

A. Claims 1, 3-7, 9, 10, 12, 15, 22, 23, 25, 26, 28, 31, 34, 35, and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua in view of Davidson and Vargas.

"All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

The combined teachings of Chua, Davidson, and Vargas fail to teach or suggest each and every feature of independent claim 1.

THE CHUA REFERENCE

Chua discloses:

> In this embodiment, touching a key 22 on the virtual keyboard 20 is not simply taken as a selection of that key. There may have been a mistake owing to parallax error and/or inaccurate aim. Instead, the driver circuit 36 uses the **selected position relative to the representative positions of the keys** to determine possible candidates (candidate keys) for the desired symbol. It also uses the **offset between the selected position and the representative positions** of the candidate keys and predictive word input technology to derive a list of candidate words. [Paragraph 0023, emphasis added]

FIG. 3 is a close up of an area of the virtual keyboard 20. This area is roughly centered on the letter keys for "t", "y", "g" and "h", each with its own representative position 50t, 50y, 50g, 50h. Assuming the user touches the screen 12 at the point 52, marked with an X, he may, indeed, have wanted to select the letter "h", as the selected position 52 falls within the display area 54h for that letter. On the other hand, he may have been aiming at the "t", "y" or "g" key and missed. After all, the selected position 52 is only just on the "h" key and, due to the staggered alignment of the rows of keys, is actually closer to the centre of the "y" key than to the centre of the "h" key. It is also not much further away from the centers of the "t" and "g" keys. [Paragraph 0024]

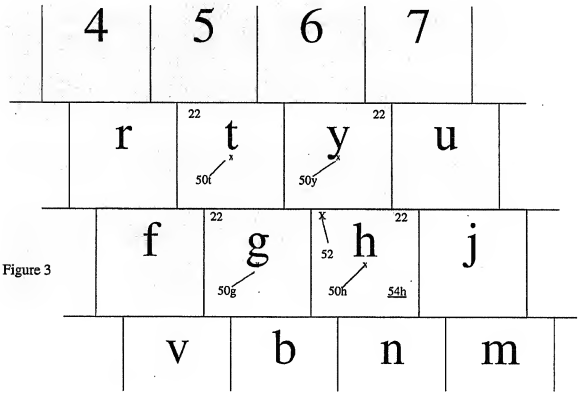


Figure 3

Chua teaches detecting a touch at a selected position 52 and based on the distance between the selected position and representative positions, deciding a set of candidate keys from which to derive candidate words. Chua teaches that the centers 50t, 50y, 50g, and 50h of individual virtual keys are the representative positions, as shown with a selected position 52 in Figure 3 above.. Chua therefore does not teach or suggest *associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character*, as set forth in independent claim 1. Chua's Figure 3 (replicated above) clearly shows that the areas associated with

the characters t, y, g, and h are mutually exclusive and do not overlap. Each area is shown associated with only one character. No intermediate regions are shown or described as being formed. Chua makes no mention that the areas associated with the characters t, y, g, and h overlap one another.

Because Chua teaches use of distances between a touch location and a center location of a key to determine possible candidates, Chua has no need to also utilize overlapping regions, e.g., to determine possible candidates. Thus, one of skill in the art would not look to Chua to teach or suggest *at least some associated areas overlap with one another to form intermediate regions that represent more than one character*, as set forth in independent claim 1.

Thus, the statement in the April 14, 2010 Advisory Action, "Chua has shown through his drawings and disclosure associating areas with characters that can represent more than one character" is not supported by Chua and further is contradictory to the statement on page 3 of the Final Office Action of December 28, 2009 that states "However Chua does not explicitly show an intermediate region that represents more than one character."

The Advisory Action further states, "Chua does not explain in detail that intermediate regions are formed, therefore Davidson has been provided to show that the functionality of overlapping regions (Figure 9a) to form an intermediate region was know[n]. Therefore the known functionality of an intermediate region can be incorporated with the Chua functionality. Hence the functionality is provided, how the system addresses the selection may differ but does not take away from the fact that the functionality exists."

THE DAVIDSON REFERENCE

Davidson discloses **non-overlapping** extended touch zones for adjacent keys of a virtual keyboard (Column 2, lines 13-32) with dead zones between the extended touch zones (Column 5, lines 23-48). When a touch location falls within a dead zone, nothing is selected. Davidson entire discussion of FIG. 9(a) is as follows:

FIGS. 9(a)-9(e) illustrate three adjacent active control keys and the manner in which dead zones are defined between each pair of the three active control keys. [Col. 2, lines 58-60]

The reason for updating the near miss distance at step 248 is best described by making reference to FIGS. 9(a)-9(e). [Col. 18, lines 6-7]

FIGS. 9(a)-(e) show three adjacent control keys 520, 522 and 524. FIG. 9(a) also illustrates, in dotted lines, areas 542, 544 and 546 that are respectively spaced from the display areas of control keys 520, 522 and 524 by the predetermined distance r in every direction. FIG. 9(a) further indicates a touch location 540 that is located within each of the areas 542, 544 and 546. [Col. 18, lines 8-14]

Thus, FIG. 9(a) is merely an illustration of the problem that Davidson is solving, not an illustration of a solution. The problem is how to determine what selection is made by a touch location 540 that is located within a distance r of each of three different control keys. Davidson's solutions are described with respect to FIG. 9(b) through 9(e), each of which teaches dead zones between non-overlapping extended zones of the control keys. Davidson resolves the problem by teaching shortening the extended touch zones such that they do *not* overlap, and creates dead zones between the extended touch zones that result in no action when touched, as shown in FIG. 9b (see col. 18, lines 15-19 and lines 58-65). Neither FIG. 9(a) nor its related text teaches or suggests that "the functionality of overlapping regions (Figure 9a) to form an intermediate region was know[n]" as suggested by the Examiner in the Advisory Action. Davidson's FIG. 9(a) and its associated text do not teach or suggest *associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character*, as set forth in independent claim 1.

Davidson teaches away from the features of independent claim 1 because each extended touch zone is associated with a single control key, rather than more than one character, and the extended touch zones do not overlap one another. The extended touch zones 542, 544, 546 are separated by dead zones 532, 534, 536, and if no dead zone is provided, the extended touch zones abut and do not overlap (Column 6, lines 1-10). Furthermore, the dead zones 532, 534, 536 cannot be considered to be intermediate regions as set forth in independent claim 1 because the dead zones do not represent

any characters as set forth in the claims, but rather act as a spacer between extended touch zones. A touch located in any dead zone 532, 534, 536 results in no selection of any control key.

The keys in FIG. 9(a) through 9(e) of Davidson are control keys, and each extended touch zone represents only one control key. Thus, Davidson teaches a method by which only one control key is identified, if one is identified at all, when a touch is located between control keys. When an intermediate region represents multiple characters, one of skill in the art may utilize a predictive text algorithm to determine which of the multiple characters to select. One of skill in the art would not apply a predictive text algorithm to select from a plurality of control keys. An intermediate region representing multiple control keys is thus meaningless to one of skill in the art. Davidson does not teach or suggest an intermediate region representing multiple control keys, thus Davidson does not teach or suggest how to disambiguate a touch in such a region. Thus, Chua and Davidson teach the resolution of fundamentally different problems, identification of potential words from multiple possible characters as opposed to identification of which control key is selected. Thus, one of skill in the art would not be motivated to combine Chua and Davidson to provide *at least some associated areas overlap with one another to form intermediate regions that represent more than one character*, as set forth in independent claim 1.

Neither Davidson, Chua, nor the combination of Chua and Davidson, teaches or suggests *associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character*, as set forth in independent claim 1.

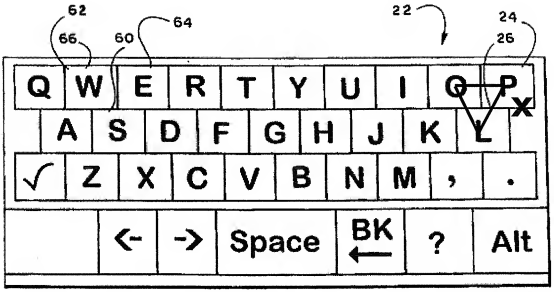
The Examiner cites Vargas as teaching, *for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character*, as set forth in independent claim 1.

THE VARGAS REFERENCE

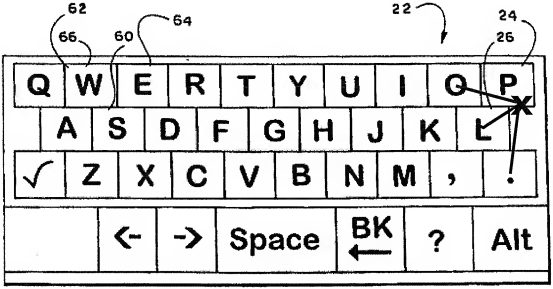
Vargas discloses calculating distances from a contact point to the center points of all the keys adjacent to a struck key and selects the two keys with center points closest to the contact point (Column 5, lines 55-65). Vargas selects the most likely candidate for entry based on the distance between the contact point and the center points of each of these two keys and the frequency with which the character might appear in text based on previously entered characters (Column 5, lines 66 through Column 6, line 7).

Vargas does not teach or suggest, *for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character*, as set forth in independent claim 1. Instead, Vargas teaches calculating distances from the contact point to the center points of all the keys adjacent to the struck key and passing the struck key and the two keys closest to a struck key to a predictive text engine to determine which character was selected. Associating an area would be redundant to Vargas' teachings of calculating distances. Thus, given lack of teach of associating an area as well as the calculation of distances, one of ordinary skill in the art would not be motivated to combine Vargas with Chua or Davidson, and further such a combination would not result in the elements of the independent claims.

The following example illustrates the differences between Vargas algorithm and the method of independent claim 1. In the present application, when the touch location, denoted by "x," is below the P in the keyboard shown via the example of Figure 1 of Vargas (reproduced below), the centers of the letters P, O, and L are shown joined in the triangle. The character P is not within the overlapping area of the characters P, O, and L.



The teachings of Vargas are applied to the same touch location denoted by "x" in the above example in Figure 1 of Vargas (reproduced below). Because the touch location is more than 0.2 of the width of the key from the center point of the "P" key, the distance from the touch location to each of the nearest characters P, O, L, and "." is calculated (see below) by Vargas. Vargas' algorithm selects the most likely candidate for entry based on the distance between the touch location and the center points of each of the keys P, O, L, and "." and the frequency with which the character might appear in text based on previously entered characters.



Based on the foregoing, Vargas' algorithm clearly works in a fundamentally different manner than the method of independent claim 1.

Thus, Chua, Davidson, and Vargas, alone or in combination, fail to teach all of the elements of claim 1.

Even if combined, Chua, Davidson, and Vargas fails to disclose *associating areas of a touch interface of a mobile electronic device with characters wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character* and *for at least one particular character, the associating comprises associating an area of the touch interface with the particular character by joining the centers of characters nearest to the particular character*, as set forth in independent claim 1. Thus, the combination of Chua, Davidson, and Vargas fails to teach or suggest all the elements of independent claim 1.

The Final Office Action includes Figure 8B of the present application superimposed onto Figure 1 of the Vargas reference. The M.P.E.P. does not permit use of this drawing to support a rejection, e.g., as a reference against the claims of the present application. Further, this drawing is an impermissible application of hindsight given that part of the drawing contains elements from the present application rather than teachings from the Vargas reference. The Examiner must utilize only the teachings of the reference for a proper rejection.

The Examiner has provided no evidence to suggest a reasonable expectation of success or even the ability to practice the claims of the present application given any combination of Chua, Davidson, and Vargas. Further, one of ordinary skill in the art would not be able to produce the elements of the claims from the cited references, given the lack of teachings and conflicting problems and soluctions of these references.

The claims of the present invention are not taught or suggested by Chua, Davison, and/or Vargas. Combining these references fails to teach or yield the invention as claimed. The combination of these references fails to teach or suggest all the elements of the claims. The rejections fail to provide the teachings necessary to fill the gaps between these references in order to yield the invention as claimed. Further, one of skill

in the art would not be motivated to make such a combination. The rejections take items out of context and combine them without motivation, in effect producing the words of the claims (and sometimes, not even the words or concepts of the claims), without their meaning or context. Therefore, the present claims are not obvious in light of any combination of Chua, Davison, and/or Vargas.

For at least the reasons set forth above for independent claim 1, the combination of Chua, Davison, and Vargas also fails to teach or suggest all the elements of independent claims 6, 22, 34, and 38. For example, these references do not teach or suggest *associating areas of the one or more touch interfaces with the characters, wherein at least some of the areas overlap with one another to form intermediate regions that represent more than one character* and *for a first character, an area of the one or more touch interfaces associated with the first character is bounded by joining the centers of characters nearest to the first character*, as set forth in claim 6; *associate areas of the one or more touch interfaces with the characters wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character* and *for a first character, an area of the one or more touch interfaces associated with the character is bounded by joining the centers of characters nearest to the character*, as set forth in claim 22; *associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character* and *for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character*, as set forth in claim 34; and *associating areas on a touchscreen display of an electronic device with characters, at least some of the associated areas overlapping with one another at intermediate regions and at least one of the areas established by joining the centers of adjacent areas*, as set forth in claim 38.

Furthermore, claims 3-5, 7, 9, 10, 12, 15, 23, 25, 26, 28, 31, and 35 are dependent on an independent claim that is shown to be allowable. Thus, these dependent claims are also allowable.

Therefore, the rejections under 35 U.S.C. §103(a) to claims 1, 3-7, 9, 10, 12, 15, 22, 23, 25, 26, 28, 31, 34, 35, and 38 are traversed.

B. Claims 8, 11, 24, and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua, Davidson, Vargas, and further in view of Moon. Claims 36 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chua, Davidson, Vargas, and further in view of Robinson.

Neither Moon nor Robinson set forth teachings to overcome the deficiencies of Chua, Davidson, and Vargas to teach the elements of the independent claims.

Furthermore, claims 8, 11, 24, 25, 27, 36, and 37 are dependent on an independent claim that is shown to be allowable. Thus, the dependent claims are also allowable.

C. Summary of Argument

The Examiner has failed to establish a *prima facie* case of obviousness. The combined teachings of Chua, Davidson, and Vargas fail to teach or suggest all the elements of the claims, thus it would not be obvious to produce the invention as claimed from these references, and the 35 U.S.C. §103(a) rejections are not supported. All rejections are shown to be traversed. Withdrawal of the rejections under 35 U.S.C. §103(a) and a Notice of Allowance of claims 1, 3-12, 15, 22-28, 31, and 34-38 are hereby respectfully requested.

Respectfully submitted,

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IX. CLAIMS APPENDIX

Claims 1, 3-12, 15, 22-28, 31, and 34-38 are involved in the appeal and are reproduced below. Claims 2, 13, 14, 16-21, 29, 30, 32, and 33 are cancelled.

1. A method comprising:

associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character;

detecting a location of a user's touch on the touch interface;

for each area of the touch interface which includes the location, identifying the character associated therewith; and

wherein for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character.

2. (Cancelled)

3. The method of claim 1, further comprising: if two or more characters are identified, using predictive text software to select one of the characters.

4. The method of claim 3, further comprising providing the predictive text software with an indication that the location is closer to one of the identified characters than to others of the identified characters.

5. The method of claim 3, further comprising: providing the predictive text software with an indication of how much closer the location is to one of the identified characters than to others of the identified characters.

6. A mobile electronic device comprising:

one or more touch interfaces to receive a touch by a user;

a display for displaying one or more rows of characters; and

a microprocessor for associating areas of the one or more touch interfaces with the characters, wherein at least some of the areas overlap with one another to form intermediate regions that represent more than one character and identifying which characters are associated with the areas of the one or more touch interfaces that include a location of the touch;

wherein for a first character, an area of the one or more touch interfaces associated with the first character is bounded by joining the centers of characters nearest to the first character.

7. The mobile electronic device of claim 6, wherein the one or more touch interfaces is a single touchpad.

8. The mobile electronic device of claim 7, wherein the rows of characters are spaced at a sufficient vertical distances that there is no ambiguity as to which row of characters is being touched.

9. The mobile electronic device of claim 6, wherein the one or more touch interfaces are two or more touchpads.

10. The mobile electronic device of claim 6, wherein the one or more touch interfaces is a single touchscreen.

11. The mobile electronic device of claim 10, wherein the rows of characters are spaced at a sufficient vertical distances that there is no ambiguity as to which row of characters is being touched.

12. The mobile electronic device of claim 10, wherein for a first character, an area of the touchscreen associated with the first character is overlapped by an area of the touchscreen associated with a different character of an adjacent row.

13. (Cancelled)
14. (Cancelled)

15. The mobile electronic device of claim 6, wherein the microprocessor is configured to execute a predictive text software module to select one of the characters.

16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)

22. A mobile electronic device comprising:

one or more touch interfaces configured to display one or more rows of characters and receive a touch by a user; and

a microprocessor configured to associate areas of the one or more touch interfaces with the characters wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character, and the microprocessor is further configured to identify which characters are associated with the areas of the one or more touch interfaces that includes a location of the touch;

wherein for a first character, an area of the one or more touch interfaces associated with the character is bounded by joining the centers of characters nearest to the character.

23. The mobile electronic device of claim 22, wherein the one or more touch interfaces is a single touchpad.

24. The mobile electronic device of claim 23, wherein the rows of characters are spaced at a sufficient vertical distances that there is no ambiguity as to which row of characters is being touched.

25. The mobile electronic device of claim 22, wherein the one or more touch interfaces are two or more touchpads.

26. The mobile electronic device of claim 22, wherein the one or more touch interfaces is a single touchscreen.

27. The mobile electronic device of claim 26, wherein the rows of characters are spaced at a sufficient vertical distances that there is no ambiguity as to which row of characters is being touched.

28. The mobile electronic device of claim 26, wherein for a first character, an area of the touchscreen associated with the first character is overlapped by an area of the touchscreen associated with a different character of an adjacent row.

29. (Cancelled)
30. (Cancelled)

31. The mobile electronic device of claim 22, wherein the microprocessor is configured to execute a predictive text software module to select one of the characters.

32. (Cancelled)
33. (Cancelled)

34. A computer readable medium storing instructions for execution by a processor of a mobile device for causing the mobile device to implement a method comprising:

associating areas of a touch interface of a mobile electronic device with characters, wherein at least some of the associated areas overlap with one another to form intermediate regions that represent more than one character;

detecting a location of a user's touch on the touch interface; and

for each area of the touch interface which includes the location, identifying the character associated therewith; and

wherein for a first character, the associating comprises associating an area of the touch interface with the first character by joining the centers of characters nearest to the first character.

35. The medium of claim 34, wherein the method further comprises if two or more characters are identified, using predictive text software to select one of the characters.

36. The method of claim 35, further comprising: providing the predictive text software with an indication that the location is closer to one of the identified characters than to others of the identified characters.

37. The method of claim 35, further comprising: providing the predictive text software with an indication of how much closer the location is to one of the identified characters than to others of the identified characters.

38. A method comprising:

associating areas on a touchscreen display of an electronic device with characters, at least some of the associated areas overlapping with one another at intermediate regions and at least one of the areas established by joining the centers of adjacent areas;

detecting a location of a touch on the touchscreen display; and

identifying the characters associated with the areas in which the touch is located.

IX. EVIDENCE APPENDIX

No evidence was submitted pursuant to 37 C.F.R §1.130, §1.131, or §1.132.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are submitted herewith.